

Name: _____

Agricultural Structures

Directions:

Evaluate the student by checking the appropriate number or letter to indicate the degree of competency. The rating for each task should reflect **employability readiness** rather than the grades given in class.

Rating Scale:

- 3 Mastered** – can work independently with no supervision
- 2 Requires Supervision** – can perform job completely with limited supervision
- 1 Not Mastered** – requires instruction and close supervision
- N No Exposure** – no experience or knowledge in this area

NOTE: The code in parentheses is the competency identification number used in computerized management systems.

NOTE: All competencies involving safety require a Number 3 Rating.

3	2	1	N	A. Working with Plans	Notes:
				1. Read and create a simple construction drawing (A001)	
				2. Develop a plan of procedure and a bill of materials for a construction project (A002)	
				Other:	

3	2	1	N	B. Farmstead Planning	Notes:
				1. Evaluate a site for a home (B001)	
				2. Arrange a farmstead (B002)	
				3. Describe characteristics of disposal systems for managing livestock manure (B003)	
				Other:	

3	2	1	N	C. Building Construction	Notes:
				1. Describe safety practices associated with building construction (C001)	
				2. Identify types and designs of buildings and their methods of construction (C002)	
				3. Identify and select building materials (C003)	
				4. Identify the uses of different fasteners and fastening systems (C004)	
				5. Describe how to construct a floor and subfloor (C005)	
				6. Describe the purpose of walls, types of walls, supports, and siding used in agricultural buildings (C006)	
				7. Select a roof support system (C007)	
				8. Select roofing materials (C008)	
				9. Identify factors affecting the heating, cooling, and ventilation of agricultural structures (C009)	
				Other:	

3	2	1	N	D. Concrete	Notes:
				1. Discuss safety in working with concrete (D001)	
				2. Identify factors that affect the quality of fresh concrete (D002)	
				3. Identify site preparation requirements (D003)	
				4. Describe the procedure for preparing to pour a concrete slab (D004)	
				5. Explain the procedure for ordering, pouring, and finishing concrete (D005)	
				6. Identify factors affecting the quality of cured concrete (D006)	
				7. Describe the procedure for pouring a concrete wall (D007)	
				Other:	

3	2	1	N	E. Electricity	Notes:
				1. Identify the dangers and safety practices associated with electrical work (E001)	
				2. Identify the terms associated with electrical work (E002)	
				3. Match types and sizes of wire and their uses (E003)	
				4. Identify the importance of grounding and GFCI protection (E004)	
				5. Locate lights, outlets, and switches, and identify circuit protection needs (E005)	
				6. Identify the symbols used in agricultural wiring plans (E006)	
				7. Describe practices for running wire to an agricultural structure and wiring within the building safely (E007)	
				8. Identify procedures for connecting the drop wires and branch circuit wires to the SEP (E008)	
				9. Describe how to run wiring from the SEP to a junction box, lights, and receptacles (E009)	
				10. Calculate cost and electrical power using Ohm's Law (E010)	
				11. Describe procedures for planning and installing lighting protection (E011)	
				12. Identify problems in electrical systems (E012)	
				Other:	

3	2	1	N	F. Plumbing	Notes:
				1. Calculate how much water is needed for a farmstead (F001)	
				2. Discuss safety practices for plumbing (F002)	
				3. Identify pipe types and determine size requirements (F003)	
				4. Measure, cut, and connect pipes and tubing (F004)	
				5. Identify methods of protecting water pipes against freezing (F005)	
				Other:	

3	2	1	N	G. Fencing	Notes:
				1. Discuss the terminology, dangers, and safety practices associated with building fences (G001)	
				2. Describe how to set and brace wood and steel posts (G002)	
				3. Describe techniques for building barbed and woven wire fences (G003)	
				4. Describe techniques for building high tensile and electric fences (G004)	
				5. Identify fence mending techniques (G005)	
				Other:	

3	2	1	N	Leadership & Personal Development for Advanced Students (Leadership Duty C)	Notes:
				1. Develop a resume and complete a job application (C001)	
				2. Develop a plan for finding a job (C002)	
				3. Describe how to apply and interview for a job (C003)	
				4. Describe the characteristics needed to develop desirable personal and social skills (C004)	
				5. Describe the importance and process of developing better human relationships (C005)	
				Other:	

3	2	1	N	Using the Missouri Farm Business Record Book (SAE Duty D)	Notes:
				1. Describe the two types of accounting methods (D001)	
				2. Complete the forms needed to open the Missouri Farm Business Record Book (D002)	
				3. Develop a projected cash flow (D003)	
				4. Record receipts and expenditures in the Missouri Farm Business Record Book (D004)	
				5. Complete additional records in the Missouri Farm Business Record Book (D005)	
				6. Complete the forms necessary to summarize the Missouri Farm Business Record Book (D006)	
				7. Analyze the farm business using the Missouri Farm Business Record Book (D007)	
				Other:	